IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claim 1 (Currently Amended): A method of producing a free standing structure, the method comprising:

providing a patterned soluble substrate having a raised pattern formed on a surface of said substrate, said raised pattern having side walls and comprising at least one material which forms said surface;

depositing material over said raised pattern, said deposition being directional such that material is not deposited onto the side walls of the raised pattern; and

dissolving said substrate to release said deposited material to form said free standing structure from said released deposited material.

Claim 2 (Original): The method of claim 1, wherein said raised pattern defines a planar surface.

Claim 3 (Original): The method of claim 1, wherein said raised pattern comprises a 3D relief pattern.

Claim 4 (Original): The method of claim 1, wherein said substrate comprises a second pattern of lower relief than said raised pattern, said second pattern being separated from said raised pattern by a step, and said method further comprises:

depositing material over said second pattern.

Claim 5 (Original): The method of claim 1, wherein said substrate comprises a plurality of patterns of lower relief than said raised pattern, each of said plurality of patterns being separated by a step from said raised pattern and from the other patterns in said plurality of patterns, and said method further comprises:

depositing material over each of said patterns in said plurality of patterns.

Claim 6 (Original): The method of claim 4, wherein said dissolving dissolves only part of said substrate to release said deposit material from said raised pattern but not from said second pattern.

Claim 7 (Original): The method of claim 6, further comprising:

dissolving said substrate in a second dissolving process, to release deposit material to form a free standing structure comprised of said deposit material from said second pattern.

Claim 8 (Original): The method of claim 1, wherein said depositing comprises depositing of an aluminium layer.

Claim 9 (Original): The method of claim 1, wherein said depositing produces a layer of material of thickness between 10 nm and 10 μm.

Claim 10 (Original): The method of claim 1, wherein said free standing structure is a bar code tag.

Claim 11 (Original): The method of claim 10, wherein said bar code tag comprises a strip with a plurality of holes, the positions of the holes determining the unique code of the strip.

Claim 12 (Original): The method of claim 10, wherein said bar code tag comprises a strip with a plurality of notches cut into the sides of said strip, the positions of the notches determining the unique code of the tag.

Claim 13 (Withdrawn): The method of claim 1, wherein said free standing structure comprises capacitance members for a motion sensor or accelerometer.

Claim 14 (Withdrawn): The method of claim 1, wherein said free standing structure is an antenna structure.

Claim 15 (Original): The method of claim 1, further comprising using a mould to produce a plurality of substrates, by one of injection moulding or pressing.

Claim 16 (Original): The method of claim 15, wherein said mould is a roller shape, and said pressing is carried out by rolling said mould across the surface of the substrate.

Claim 17 (Currently Amended): A method ~~of producing a mould for making a substrate with a raised pattern, said method comprising~~ as claimed in claim 15, the mould being produced by:

providing a mould material having a buried sacrificial layer, said sacrificial layer being parallel to a main surface of said mould material;

masking the main surface of said mould material with a mask pattern;

etching the mould material through said mask pattern with a first etch;

stopping said first etch at an etch stop level within said sacrificial layer; and

etching the mould material with a second etch to selectively remove the sacrificial layer below said etch stop level.

Claim 18 (Original): The method of claim 17, wherein said first etch comprises reactive ion etching or laser etching.

Claim 19 (Original): The method of claim 17, wherein said second etch comprises a wet etch.

Claim 20 (Original): The method of claim 17, comprising a further etching stage wherein a surface which is non parallel to the main surface is etched.

Claim 21 (Withdrawn): An apparatus for producing a free standing structure, the apparatus comprising:

means for providing a substrate having a raised pattern formed on a surface of said substrate, said raised pattern comprising at least one material which forms said surface;

means for depositing material over said raised pattern; and

means for dissolving said substrate to release said deposited material to form said free standing structure from said released deposited material.

Claim 22 (Withdrawn): A bar code tag, as produced by the method of claim 1.

Claim 23 (Withdrawn): A motion sensor comprising two spaced apart members, at least one of said members being capable of moving relative to the other members, wherein capacitance measurements between said members allow the detection of motion, the members being produced by the method of claim 1.

Claim 24 (Withdrawn): An antenna, as produced by the method of claim 1.

Claim 25 (Withdrawn): A plurality of custom shaped micro particles, as produced by the method of claim 1.

Claim 26 (Withdrawn): A barrier comprising a matrix and a plurality of ferritic particles embedded in said matrix, the particles being of a custom size distribution, and being produced by the method of claim 1.